Fishy Frequencies with Hardy-Weinberg

the f and F alleles must be 1, the frequency of your F allele must be .6 Using Hardy Weinberg, you can assume that in your population you have .36 FF (.6 x .6) and .48 Ff (2 x .4 x .6) as well as the original .16 ff that you counted.

Materials:

"Ocean" with equal amounts of gold and brown fish

Graph paper

Procedure:

Procedure 1:

1) Get a random population of 10 fish from the "ocean."

2) Count gold and brown fish and record in your chart; you can calculate frequencies later.

3) Eat 3 fish, chosen randomly, without looking at the plate of fish

4) Add 3 fish from the "ocean." (One fish for each one that died). Be random. Do NOT use artificial selection.

5) Record the number of gold and brown fish.

6) Again eat 3 fish, randomly chosen

7) Add 3 randomly selected fish, one for each death.

8) Count and record.

9) Repeat steps 6, 7, and 8 two more times.

10) Provide your results for the class. Fill in the class results on your chart.

Procedure 2:

1) Get a random population of 10 fish from the "ocean."

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